CALIFORNIA COASTAL COMMISSION
45 FREMONT STREET, SUITE 2000
SAN FRANCISCO, CA 94105-2219
VOICE AND TDD (415) 904-5200

W-11a

Date Filed: November 29, 1998
49th Day: January 17, 1999
(49-day waiver received)
180th Day: May 28, 1999
(180-day waiver received)
270th Day August 26, 1999
Staff: CLK-SF
Staff Report: July 23, 1999
Hearing Date: August 11, 1999
Item Number: W-11a

STAFF RECOMMENDATION
REGULAR CALENDAR

APPLICATION FILE NO.: **E-97-25**

APPLICANT: **Samedan Oil Corporation**

PROJECT DESCRIPTION: Establish a new oil and gas drill site on an existing fill pad of a currently producing oilfield located within the Los Cerritos wetland area. Project activities include drilling up to 12 oil and gas production wells, demolishing a garage, and constructing a 1-foot-high containment berm around the perimeter of the site.

PROJECT LOCATION: Bixby Lease, Seal Beach Oilfield, within the Los Cerritos wetlands, 6433 Westminster Avenue, City of Long Beach, Los Angeles County (Exhibits 1-4).

SUBSTANTIVE FILE DOCUMENTS: See Appendix A

Staff Note

Staff initially scheduled this permit application for Commission hearing in December 1998. The applicant requested a postponement of this hearing to allow time for the completion of negotiations between the property owner and the State Coastal Conservancy concerning the possible state purchase of the property surrounding the project site for wetlands restoration (see ***Wetlands Restoration*** below). In addition, the applicant requested additional time to prepare a response to issues raised by staff concerning the permit application. Along with its postponement request, the applicant waived its right to hearing within 49 days of permit application filing. The applicant later agreed to extend the period for final Commission action on the permit application

from 180 to 270 days from filing. The 270th day will be August 26, 1999. Accordingly, **the Commission must take final action on this permit application during its August meeting**.

The wetlands restoration negotiations concluded in April 1999 and the applicant provided to staff additional information concerning the project on May 26, 1999. Upon receipt of this additional information, staff scheduled a public hearing for the permit application for the Commission's July 1999 meeting (staff received this information too late to publish a staff recommendation and meet public noticing requirements for the June meeting). After receiving the staff report, the applicant requested a postponement to allow time to respond to the recommendation for denial of the application.

As of the date of this report, staff has received no additional information from the applicant since May 26 1999. If additional information is received prior to the August 11, 1999 hearing, staff will forward this information to the Commission in the form of an addendum to this staff report.

Synopsis

Project Description and Location

Samedan Oil Corporation proposes to establish a new oil and gas drilling site on an existing filled area within the Los Cerritos wetland area of Alamitos Bay. The purpose of the proposed project is to develop oil and gas reserves from an untested formation adjacent to the current production zone by slant drilling up to 12 wells from an existing fill pad located approximately 4,300 feet from the center of the reservoir.

The proposed drill site is located within an already developed fill area. An existing road provides access to the site, and oil and gas produced from the proposed wells will be processed using existing oil field facilities and transported via existing pipelines. The proposed project will not result in any new wetland fill.

Oil and gas production activities began at the Bixby Lease in 1926 and have been in continuous operation since that time. The production facilities are located on filled wetland areas and are separated from the remaining wetlands surrounding the site and the Los Cerritos Channel by a series of earthen berms.

Property Ownership

Effective October 1, 1997, Samedan entered into a Surface Use Agreement with Bixby Ranch Company and Bixby Oil and Gas, Ltd. for the surface rights necessary to carry-out the proposed project. This lease includes the provision that "If the drill site cannot be delivered as a result of regulatory or permit restrictions this Agreement shall be deemed terminated."

Samedan does not currently possess an interest in the target petroleum reserves, but indicates that it intends to enter into an oil and gas lease with Bixby Bellflower Oil Prospect, LLC, for the necessary mineral rights.

The Los Cerritos Wetlands

Historical data indicate that approximately 2,400 acres of wetlands existed at Alamitos Bay before the turn of the century. These wetlands have been filled and severely degraded due to oil production activities, flood control projects, and other urban developments. However, like the Bolsa Chica wetlands to the southeast, the wetlands within and adjacent to the oilfield retain many important wetland characteristics, including halophytic wetland vegetation, ponding and soil saturation, and habitat for migratory birds *(Sorensen 1982, Zedler 1984, Long Beach 1984, MEC 1991, SCC 1998)* (see Exhibit 5). The Cerritos Channel is used by many species of waterfowl, including the Federal and State Endangered California brown pelican and California least tern.

Currently, the Los Alamitos Significant Ecological Area (SEA), which is located approximately 1,000 feet north of the project site, contains the most biologically valuable habitat within the Los Cerritos wetlands. Because of the 1,000-foot separation between the proposed drill site and the SEA, noise, light, and vibration generated by the project would not likely affect the habitat. In addition, a series of existing and proposed berms and dikes would effectively protect the SEA from any oil spills on the drill site.

Development Adjacent to an Environmentally Sensitive Habitat Area

Although the proposed project would not require any new wetland fill, it would further degrade the adjacent disturbed wetlands. Although the adjacent wetlands are degraded, birds and other wildlife use this habitat. Studies show that noise and other human activities can significantly affect the breeding patterns and other behaviors of birds. The noise, night lighting, and vibration created by the proposed development could cause potentially adverse impacts to the environmentally sensitive habitat area (ESHA) adjacent to the proposed drill site. The project will also increase the risk of an oil spill that could be devastating to the ESHA.

Wetland Restoration

Restoration of the Los Cerritos wetlands has been planned since the 1970's. On April 22, 1999, after lengthy negotiations involving the Bixby Ranch Company, the California State Lands Commission, the Port of Long Beach (POLB), and the State Coastal Conservancy (SCC), the SCC Board approved an option agreement the purchase and restoration of 181 acres of filled and degraded wetlands surrounding the proposed project site. This purchase is currently designated a priority on the Southern California Wetlands Restoration Project list of projects.

Conceptual restoration plans developed by the SCC and the Port of Long Beach show the proposed drilling site as an "island" within the area planned for restoration. The proposed project thus limits restoration opportunities. It will also degrade the wetlands surrounding the site that implementation of the SCC and POLB restoration project will create (see Exhibits 6-7). Noise, light, vibration, and any accidental oil spills generated by the project would reduce the biological functionality of the restored wetland to be created surrounding the proposed drill site and access road. Although the project site could eventually be restored after the cessation of oil and gas

production, restoration would be delayed by more than 20 years. Future well abandonment, site cleanup, and restoration activities would further disturb surrounding habitat.

Consolidation of Oil and Gas Facilities

Coastal Act Section 30262(b) requires consolidation of new or expanded oil and gas development with existing facilities to the maximum extent feasible. This policy is particularly important for the proposed project given the anticipated wetlands restoration. Currently, wells, pipelines and processing facilities are distributed throughout the Los Cerritos wetlands. Consolidation of these facilities would significantly increase the acreage available for wetland restoration.

In order to evaluate the consistency of the proposed project with the Coastal Act's "maximum feasible consolidation" standard, the staff requested Samedan to provide a detailed consolidation plan showing where each existing and proposed well and all associated pipelines and processing facilities would be located. Staff also asked Samedan to consider the feasibility of locating the proposed wells in the area of Tank Battery No. 2 in order to increase the consolidation of facilities. Staff asked that the plan include analysis of the technical and legal feasibility of the consolidation alternatives, and be designed with consideration of the wetland restoration goals for the Los Cerritos system.

Samedan responded to staff's information request indicating that no specific facilities consolidation plan exists, but that existing facilities could be consolidated to the proposed drill site and a second site near Marketplace Pond (see Exhibits 6-7). Samedan has not provided sufficient information to determine whether consolidation centered on the proposed drill site and either Tank Battery No. 2 or the site at Marketplace Pond would represent maximum feasible and legally permissible consolidation of facilities as required under Section 30262(b), or, alternatively, whether some other site or sites would be more technically suited for facility consolidation. Samedan has not indicated what specific facilities would be relocated to the proposed drill site under this scenario or data to demonstrate that such a plan is technically feasible. Until such time that a more thorough examination of consolidation alternatives is provided, the Commission cannot determine that the proposed project is consistent with the requirements of Coastal Act Section 30262(b).

Alternatives Analysis

The proposed development will adversely affect the existing degraded wetland habitat surrounding the site and will reduce the habitat value of these areas when restored. For example, noise and light generated by the proposed project will disturb wildlife currently utilizing the adjacent degraded wetland habitat and future restored habitat. Any accidental oil spills could jeopardize adjacent wetlands. The proposed project would also preclude restoration of the areas occupied by the drill site and access road and would divide what would otherwise be contiguous habitat. An alternatives analysis under the applicable provisions of the Coastal Act and CEQA should consider alternatives that would lessen or avoid these and any other environmental impacts associated with the project.

The permit application includes an alternative sites analysis, identifying three potential alternatives to the proposed project site location (Exhibit 8). In addition, staff advised Samedan to consider several other alternative sites for the project. Samedan rejected all of these alternatives as infeasible without providing analysis and information necessary to support its conclusions.

Local Coastal Program (LCP)

The City of Long Beach Local Coastal Program (LCP) was certified by the Coastal Commission in 1980. However, the Los Cerritos section was deleted from the LCP prior to certification because California Department of Fish and Game determined that the plan did not provide adequate restoration. Hence, the Los Cerritos area remained a "white hole" in the LCP. Following certification of the LCP, the City and County commenced preparation of a Los Cerritos Wetlands LCP. The Commission approved the proposed LCP in April 1984, with suggested modifications. The suggested modifications included assurance that there would be no net loss of wetland acreage and provisions for the long-term management and financial responsibility for the area. The City and County did not submit a modified LCP, and the Commission's action expired in October 1984. At this time, Los Cerritos is the only uncertified area in the City's coastal zone. For the reasons described above, the Commission cannot find that the proposed development is in conformity with Coastal Act Sections 30231, 30240 or 30262. Therefore, approval of the proposed development would prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 in conflict with Coastal Act Section 30604.

California Environmental Quality Act (CEQA)

Samedan has not provided sufficient information to allow the Commission to determine that there is no less environmentally damaging feasible alternative or mitigation measures to avoid or substantially lessen adverse impacts that the project will cause to the environment. Therefore, the proposed development is inconsistent with Section 21080.5(d)(2)(A) of the CEQA.

Table 1 (pg. 3) summarizes project-related significant issues and potential impacts to coastal resources.

Recommendation

On the basis that the proposed project is inconsistent with Coastal Act policies and would prejudice the ability of the City of Long Beach's ability to prepare a certifiable Local Coastal Program, the staff recommends **denial** of the project.

Table 1. Issue Summary: Potential Project-Related Impacts and Mitigation Measures

Analysis
Development Adjacent to an Environmentally Sensitive Habitat Area Although the adjacent wetlands are degraded, birds and other wildlife, including several threatened or endangered species, use this habitat. The proposed development will intensify industrial activity within the Los Cerritos wetlands, generating substantial noise, vibration, and light, and will increase the risk of an oil spill. Studies show that noise and other human activities can significantly affect the breeding patterns and other behaviors of birds. An oil spill could be devastating to the habitat and associated wildlife of the wetlands. Samedan has not fully evaluated these potential adverse impacts and has not included mitigation measures with the project to avoid or reduce these impacts. The Commission cannot therefore find that the proposed development is compatible with the continuation of the adjacent ESHA as required by Coastal Act Section 30240(b).
Wetlands Restoration The proposed development will reduce restoration opportunities and will degrade the value of restored wetland habitat to be created in proximity to the project site. The proposed drilling pad and access road would delay restoration of these areas by more than 20 years, creating an industrial "island" that would divide the restorable area. The restored wetlands surrounding the drill site would be sensitive to the noise, vibration, and light impacts of the project. Restoration would require the re-establishment of waterways throughout the wetlands. These hydrologic connections would allow accidentally spilled oil from the proposed project to be transported throughout the wetlands and into open water. An oil spill could have significant adverse effects to the restored wetland habitat and wildlife. Samedan has not considered siting alternatives that would reduce or avoid such impacts. The Commission, therefore, cannot find that the proposed development conforms with Coastal Act Section 30231.
Consolidation of Oil and Gas Production Facilities Samedan proposes that the project would facilitate the consolidation of oil and gas facilities in the Los Cerritos area because the new wells would be sited on an existing fill-pad where oil and gas facilities are already located. However, Samedan has not provided a specific consolidation plan or an analysis of potential consolidation alternatives. In accordance with Coastal Act Section 30262(b) and with the restoration goals for the area, the Commission must find that the proposed project will achieve the maximum feasible and legally permissible consolidation with existing facilities. Samedan has not provided the information necessary to make this determination. Therefore, the Commission is unable to find that the development conforms with Coastal Act Section 30262(b).
Alternatives Analysis Samedan's alternatives analysis does not consider a number of potential less environmentally damaging feasible alternative sites for the project. The application identifies and rejects a number of alternative sites for the project. However, Samedan has not provided sufficient evidence to support its rejection of these alternatives. For example, while the current record for horizontal distance in extended reach drilling is 34,728 feet, the alternative sites identified by Samedan are limited to those within a 5,000-foot radius of the reservoir. This limitation is not supported by an examination of the specific economic and technical constraints from which the 5,000-foot limit proposed by Samedan is derived. Because Samedan has not fully evaluated potential project alternatives, the Commission cannot find that the proposed project represents the least environmentally damaging feasible alternative.

Table 1. (cont.)

Development would Prejudice Local Government's Ability to Prepare a Certifiable LCP
The Los Cerritos Local Coastal Program (LCP) remains uncertified due to significant unresolved issues concerning wetland restoration and future development. For the reasons described above, approval of the proposed development would prejudice the City of Long Beach's ability to prepare an LCP that is consistent with the Chapter 3 policies of the Coastal Act in conflict with Coastal Act Section 30604.
California Environmental Quality Act (CEQA)
As described above, Samedan has not demonstrated that the proposed development represents the least environmentally feasible alternative, and is therefore inconsistent with CEQA Section 21080.5(d)(2)(A).

1.0 STAFF RECOMMENDATION

Denial

The staff recommends the Commission deny the permit application.

Motion:

I move that the Commission Approve Coastal Development Permit Application No. E-97-25, in accordance with the findings specified in the staff recommendation dated July 23, 1999.

The staff recommends a **NO** vote. To pass the motion, a majority vote of the Commissioners present is required. Approval of the motion will result in the adoption of the following resolution and findings.

Resolution:

The Commission hereby **denies** permit application E-97-25, on the grounds that (1) the project is inconsistent with the Chapter 3 policies of the Coastal Act, (2) insufficient information is available to determine that the project as proposed is the least environmentally damaging feasible alternative within the meaning of the California Coastal Act and the California Environmental Quality Act and (3) approval of the proposed project would prejudice the ability of the local government to develop a Local Coastal Program consistent with the California Coastal Act.

2.0 FINDINGS AND DECLARATIONS

The Commission finds and declares as follows:

2.1 PROJECT DESCRIPTION

2.1.1 Project Location

The project site is located in the Los Cerritos wetlands area of Alamitos Bay, on the McFarland Bixby "A" Lease at 6433 Westminster Avenue, in the City of Long Beach, Los Angeles County. Historical data indicate that approximately 2,400 acres of wetlands existed at Alamitos Bay before the turn of the century. These wetlands are filled and degraded due to oil production activities, flood control projects, and other urban developments.

Oil and gas production activities began at the Bixby Lease in 1926 and have been in continuous operation since that time. The production facilities are located on filled areas and are separated from the Los Cerritos Channel by a series of earthen berms. Currently, there are approximately 50 producing wells in the oil field. Average annual crude oil production for the past five years is 148,000 barrels with an average decline in production during this period of 4.77%. The area surrounding the drill site consists of degraded wetlands. In addition to the extensive oil and gas development, large Southern California Edison and Los Angeles County Department of Water and Power facilities are located in the vicinity of the project site. The project area is also known as the Seal Beach oilfield. The lease property is located off Westminster Avenue between

Studebaker Road and Pacific Coast Highway. The site is within an existing filled area of a currently producing oilfield in the northeast portion of the lease, approximately 2,500 feet west of the San Gabriel River and 1,800 feet south of the Los Cerritos Channel. The nearest residentially developed area is approximately 2,300 feet from the project site (see Exhibits 1-3).

2.1.2 Project Overview

Samedan Oil Corporation proposes to establish a new oil and gas drilling site within the existing developed area of the Bixby Ranch oilfield. The purpose of the proposed project is to develop oil and gas reserves from an untested formation adjacent to the current production zone. Samedan proposes to access the formation by slant drilling up to 12 wells from an existing filled area located approximately 4,300 feet from the center of the reservoir.

The proposed drill site is located entirely within an already developed fill area that has been in place for approximately 50 years. Access to the site is provided by an existing road, and oil and gas produced from the proposed wells will be processed using existing facilities within the lease site and transported via existing pipelines. The proposed project will not result in any physical expansion of the oilfield. The project will be carried out in three phases: pre-drilling site preparation, testing, and production.

2.1.3 Pre-Drilling Site Preparation

The proposed drill site will be located on an existing 2.2-acre fill area, immediately adjacent to the oilfield office building. A portion of the site is currently occupied by drill pipe racks, a storage dock, and a garage. In preparation for exploratory drilling, Samedan propose to demolish the garage and to consolidate the pipe racks and storage dock to provide room for drilling equipment and operations.

The project will make use of existing processing facilities, storage tanks, and pipelines within the lease site. Produced oil and gas will be routed from the proposed wells to existing aboveground gathering lines on the drill site. The existing facilities within the Bixby lease have sufficient capacity to support both the current production and the additional production from the proposed project. No new processing facilities, tanks, or pipelines (other than the lines connecting the new wells to the existing lines) are proposed.

Prior to any drilling operations, Samedan will construct an earthen berm around the perimeter of the site to provide oil spill containment and to separate the drill site from the adjacent wetlands. The berm will be constructed by excavating an approximately one-foot-deep trench from within the drill site fill area. The excavated material will be used to construct a one-foot-high berm at the edge of the fill site. No construction or staging activity is proposed outside of the existing fill area.

2.1.4 Testing

Initially Samedan will drill a single well from the drill site to a bottom hole location approximately 4,300 feet to the north northeast, approximately 11,800 feet below the surface, to what Samedan expects to be the center of the oil and gas reservoir (Exhibit 8, Figure 2). The purpose of this initial well will be to determine whether commercial quantities of crude oil and natural gas exist in

the formation. If the initial well is not commercially successful, the well will be plugged in accordance with California Division of Oil, Gas and Geothermal regulations (DOGGR) and the project will be terminated.

Drilling and testing of the initial well will be conducted over a three-month period. Equipment and parts for the drilling rig will be trucked to the site via the existing access road from Westminster Avenue. Trucking of parts and assembly of the drill rig and associated equipment will take up to two weeks. The drill rig will be 160 feet high, and will be powered by electricity. Existing high voltage service to the Bixby Ranch site has sufficient capacity to supply power to the drilling rig. A transformer will be installed at the drill site to step down the voltage from the high voltage supply line.

Drilling muds and cuttings will be re-circulated to the surface into portable 500-barrel capacity tanks during drilling operations.[1] Drill cuttings will be removed from the drilling muds and the drilling muds will be re-circulated back down the borehole for continuation of drilling. At the completion of drilling operations, the drilling muds and cuttings will be transported to an approved Class II disposal facility.

Once the target area is reached, Samedan will initiate testing procedures. If the initial testing procedures indicate that hydrocarbons are present in the vicinity of the bore hole, metal casing will be lowered into the bore hole and cemented in place in accordance with DOGGR requirements. Samedan will then mobilize a completion rig to perforate the casing in the prospective crude oil zone to test the well. Perforating the casing allows fluid to flow into and up the well bore. The completion rig is a diesel-powered vehicle that will be driven to the site. The completion rig has a mast height of 120 feet and is similar in appearance to the workover rigs that routinely work in the Seal Beach oilfield.

To test the well, Samedan will monitor the rate of production of the well and the rate of fluid level and pressure drop to estimate the size and production capability of the reservoir. During the testing phase, all produced crude oil and natural gas will be transported by the existing gathering lines that run east to west across the northern side of the drill site to the existing Tank Battery #2. Produced water will be processed at the existing water plant adjacent to the drill site and then discharged into the County sewer system as authorized under an industrial wastewater discharge permit from the County Sanitation District. Once processed, crude oil and natural gas will be routed for sale via existing pipelines.

2.1.5 Production

If the initial well is commercially successful, Samedan will drill up to 11 additional wells within the confines of the drill site. Several months will be required to drill and complete each subsequent well in accordance with the procedures described above for the initial test well. Depending on the total number of wells drilled the drilling and completion rigs could be in operation on site for up

[1] Drilling muds are used to keep the bore hole open during drilling, to cool the drill bit, and to transport drill cuttings to the surface. Drill cuttings are the geologic materials removed from the bore hole during the drilling process.

to two years. Once production is established, Samedan will construct a concrete-block wall and plant vegetation to screen the project site from public view.

Initially, the reservoir is expected to provide enough pressure to allow fluids to come to the surface without an artificial lift or pumping system. This "flowing well" condition will last from a few months to several years, depending on the rate that pressure in the reservoir declines. Eventually, Samedan will install pumping units at each well to continue production.

Because the characteristics of the reservoir are unknown at this time, Samedan cannot specify the precise volumes of oil and gas that might be produced by the project or the length of time that the wells will be in operation. However, a commercially successful well would produce several hundred barrels of crude oil per day and several thousand cubic feet of natural gas per day. The expected total volume of the reservoir is estimated to be 50 million barrels, and Samedan expects that the project will be in operation for approximately 20 years.

2.1.6 Applicant's Property Interest

Bixby Ranch Company, a California Limited Partnership possesses surface fee title to the existing oilfield. The surface facilities and the mineral rights directly underlying the oilfield are owned by Bixby Oil and Gas, Ltd., a California Limited Partnership. Bixby Bellflower Oil Prospect, LLC, a California Limited Liability Company owns the mineral rights to the target reservoir of the proposed slant drilling project.

Effective October 1, 1997, Samedan entered into a Surface Use Agreement with Bixby Ranch Company and Bixby Oil and Gas, Ltd. for the surface rights necessary to carryout the proposed project. This lease includes the provision that "If the drill site cannot be delivered as a result of regulatory or permit restrictions this Agreement shall be deemed terminated."

Samedan does not currently possess an interest in the target petroleum reserves, but indicates that it intends to enter into an oil and gas lease with Bixby Bellflower Oil Prospect, LLC, for the necessary mineral rights.

2.2 BACKGROUND

2.2.1 Project Site

Before the turn of the century, about 2,400 acres of wetlands existed in the Los Cerritos area *(MEC 1991)*. Beginning in the 1920's the area was filled and the waterways channelized primarily to support oil and gas development. Today, the Los Cerritos wetlands consist of scattered fresh, brackish and saltwater wetlands. The least disturbed wetland habitat remaining at Los Cerritos is within the area designated as the Los Alamitos Significant Ecological Area (SEA) which is located approximately 1,000 feet north of the project site. The area immediately adjacent to the proposed drill site is primarily comprised of ruderal marsh. In addition to ruderal marsh, other wetland habitats occur in the area between the project site and the SEA.

Despite its degraded condition, the Los Cerritos wetlands continue to support a variety of wildlife, including several endangered species. Nine breeding pairs of the State Endangered

Belding's savannah sparrow were recorded in the SEA in 1991. The intertidal mudflats in the SEA are heavily used by shorebirds. Like the Bolsa Chica wetlands to the southeast, the wetlands within the oilfield retain some wetland characteristics, including halophytic wetland vegetation, ponding and soil saturation, and habitat for migratory birds *(SCC, 1998)*. The Cerritos Channel is used by many species of waterfowl, including the Federal and State Endangered California brown pelican and California least tern.

2.2.2 LCP History and Jurisdiction

The City of Long Beach annexed Los Cerritos in November 1997, prior to which the area remained an unincorporated island under Los Angeles County jurisdiction. In anticipation of annexation, the City included Los Cerritos as a part of its South East Area Development and Improvement Plan (SEADIP), which was adopted in 1977. The SEADIP included a wetlands restoration section, developed by the City in partnership with the California Coastal Conservancy, the California Department of Fish and Game (CDFG), and Los Angeles County. The SEADIP was incorporated into the City of Long Beach Local Coastal Program (LCP) which was certified by the Coastal Commission in 1980. However, the Los Cerritos section was deleted from the LCP prior to certification because CDFG determined that the plan did not provide adequate restoration. Hence, the Los Cerritos area remained a "white hole" in the LCP.

Following certification of the LCP, the City and County commenced preparation of a Los Cerritos Wetlands LCP. The Commission approved the proposed LCP in April 1984, with suggested modifications. The suggested modifications included assurance that there would be no net loss of wetland acreage and provisions for the long-term management and financial responsibility for the area. The City and County did not submit a modified LCP, and the Commission's action expired in October 1984 in accordance with the Commission's regulations (CCR § 13537(b)). No further submittals have been made to the Commission, and the area therefore remains a "white hole".

On April 22, 1999,after lengthy negotiations involving Bixby, the California State Lands Commission (CSLC), the Port of Long Beach (POLB), and the State Coastal Conservancy (SCC), the SCC Board approved an option agreement for the purchase and restoration of 181 acres of filled and degraded wetlands surrounding the proposed drill site (Exhibit 9). The purpose of the option agreement is to provide for the remediation, public acquisition, and restoration of the property during the 15-month term of the option. The SCC and the Port of Long Beach have developed conceptual plans for this restoration project (see Exhibits 6 and 7). In consideration of this interest and in recognition of the high value in restoring these wetlands, the Southern California Wetlands Restoration Project Board of Governors voted to include acquisition of the Bixby Ranch property on its list of recommended clearinghouse projects. The restoration options for Los Cerritos have been the subject of previous studies as well *(Sorenson 1982, Zedler 1984, and MEC 1991)*.

2.2.3 Other Agency Approvals

No discretionary permits or approvals are required for the proposed project from either the City of Long Beach or any other agency. Consequently, no analysis has been undertaken of the project under CEQA separate from this analysis of the coastal development permit application.

A drilling permit is required under the City of Long Beach Oil Code (code). Because the drill site is located within a designated Oil Operating Area under the code, no discretionary local approval is required. The code provides for the addition of new Oil Operating Areas through actions by the Planning Commission and the City Council.[2]

2.3 Coastal Act Issues

2.3.1 Development Adjacent to an Environmentally Sensitive Habitat Area

Coastal Act Section 30240(b) states:

> *Development in areas adjacent to environmentally sensitive habitat areas… shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.*

As discussed in section 2.2.1 above, even in its currently degraded condition, the Los Cerritos wetlands continues to support important habitat for a variety of wildlife, including several endangered species. While the Los Alamitos Significant Ecological Area (SEA) contains the habitat with the highest current values, the degraded wetlands between the SEA and the proposed drill site, including the area just adjacent to the drill site, also provide habitat value that is subject to protection under Coastal Act Section 30240(b) as an environmentally sensitive habitat area (ESHA).

Oil Spills

Samedan's analysis of potential environmental impacts of the project concludes that there is no risk that the SEA could be affected by a project-related oil spill because it is separated from the drill site and associated pipelines by a series of berms and dikes. However, the application does not consider the risk of harm from a spill into the existing wetlands located within the oilfield. Such a spill could result in a significant adverse impact to this ESHA.

The project description indicates that the proposed drill site would be surrounded by a containment berm and that any spills would be retained on-site. In addition, the pipelines transporting oil from the drill site are equipped with automatic leak detection and shut-off systems. These measures would reduce the risk of an oil spill but cannot eliminate the possibility of a spill into the ESHA. Containment berms can be overtopped or breached. Modern pipelines with leak detection and automatic shut-off systems are not 100% fail-safe. Pipeline failures resulting in oil spills continue to occur despite such equipment. For example, 163 barrels of crude

---

[2] Section 12.08.320 of the Long Beach Oil Code provides the Planning Commission and City Council must make the following findings before changing the boundary of, creating or deleting an oil operating area:

A. The change, creation or deletion will not adversely affect the character, livability or appropriate development of surrounding community;

B The change creation or deletion is necessary to produce the petroleum envisioned to be produced from the site, and the petroleum cannot feasibly be reproduced from other sites within the oil operating areas by unitization or production agreements, slant drilling or other mechanisms; and

C The change creation or deletion will not unreasonably hinder production of existing petroleum reserves.

oil were spilled in State waters offshore of Santa Barbara County due to a rupture in the Platform Irene pipeline. In this case, platform personnel over-rode the automatic shutdown of the pipeline. Failure of a computer controlled leak detection system lead to the release of approximately 277,000 gallons of gasoline into a river in Bellingham Washington that resulted in two deaths. Such incidents demonstrate that despite the use of modern safety equipment, the risk of oil spills cannot be eliminated.

An oil spill into the wetlands surrounding the proposed drill site would have a devastating impact to this ESHA. Because the possibility that the proposed project could result in such a spill cannot be eliminated, the project would not be consistent with the continuation of this habitat.

Noise

The permit application includes a preliminary estimate of the noise contour that would be generated by the proposed project (Exhibit 10). The estimate is considered preliminary because it is based on generalized data and does not account for the specific equipment and site characteristics of the proposed project. The estimated noise contour indicate that noise levels generated from the project would vary from 90 decibels (dBA) directly adjacent to the drill site, to 65dBA 1,000+ feet away at the SEA. Samedan's analysis also concludes that the SEA will not be affected by noise impacts because traffic noise from Studebaker road is greater (68dBA) than the 65dBA-level from the project. However, the application does not consider the potential effects of project-related noise to the ESHA directly adjacent to the proposed project site. In addition, although it includes estimated vibration contours, the permit application does not contain a discussion of impacts of project related vibration to the adjacent ESHA or to the SEA.

The permit application indicates that noise level from traffic 200 feet from Studebaker road would be approximately 68dBA. Busy roadways surround the Los Cerritos wetland area. However, traffic noise effects only a relatively narrow band around the outer edges of the wetlands. The proposed project will substantially increase noise levels throughout all but a small portion of the area within a 1000-foot radius of the drill site. This radius encompasses virtually the entire wetland area, including the majority of the SEA.

A recent study found that the density of breeding birds is decreases by 30% to 100% in areas where noise levels exceed a threshold of 36dBA to 60dBA. The change in density and threshold noise level vary depending on the species *(Reijnin et. al. 1996)*. Another study conducted by the Wildlife Research Laboratory of the Florida Game and Fresh Water Fish Commission, and the Florida Office of Environmental Services concludes that:

" Breeding colonial waterbirds are particularly susceptible to human disturbance because of their high-density nesting habits. Identified detriments to reproductive success include egg and nestling mortality, nest evacuation, reduced nestling body mass and slower growth, premature fledgling, and modified adult behaviors." (Rodgers & Smith 1994)

Samedan concludes that because breeding pairs of Belding's savannah sparrows have been observed within the SEA near Studebaker Road, noise levels of 65dBA or less do not interfere

with activities. This assertion contradicts the studies cited above. The observation that some breeding activity remains in the area does not, on its own, support the conclusion that the density of breeding birds in the area is not reduced due to traffic noise. Project related noise would substantially exceed the 36dBA to 60dBA disturbance threshold observed in the Reijnin study. Based on the noise contours estimated by Samedan and the information contained in the above cited studies, project generated noise would adversely affect bird populations in the surrounding wetlands.

The permit application does not consider the feasible mitigation measures to minimize the impacts of noise and vibration to the ESHA such as soundproofing of equipment, sound walls, and avoidance of peak wildlife use periods. Without considering either the effects of noise and vibration to the adjacent ESHA or mitigation measures to reduce these effects, Samedan cannot demonstrate that the proposed project has been sited and designed such that it would not degrade the adjacent ESHA and would be compatible with the continuance of the habitat.

Light

Samedan proposes to conduct drilling operations around the clock. The application specifies that night lighting will be directed downward and will not disturb wildlife in the SEA 1,000 feet away. However, the application does not consider the effects of night lighting to the ESHA adjacent to the proposed drill site. Night lighting could adversely affect birds and other wildlife in the wetlands near the drill site.

The permit application does not consider the feasible mitigation measures to minimize the impacts of night lighting to the ESHA such as avoidance of peak wildlife use periods. Without considering either the effects of noise and vibration to the adjacent ESHA or mitigation measures to reduce these effects, Samedan cannot demonstrate that the proposed project has been sited and designed such that it would not degrade the adjacent ESHA and would be compatible with the continuance of the habitat.

Conclusion – Development Adjacent to an ESHA

The proposed project would cause potentially significant adverse impacts to the adjacent ESHA. The permit application does not fully consider alternative siting that could lessen or avoid adverse impacts to the ESHA. Nor does the proposed project include feasible mitigation measures to minimize impacts to the ESHA. Therefore, the Commission denies this permit application on the grounds that the project does not conform to the requirements of Coastal Act Section 30240(b).

2.3.2 Wetland Restoration

Coastal Act section 30200 states in relevant part that:

> *(a) Consistent with the coastal zone values cited in Section 30001 and the basic goals set forth in Section 30001.5, and except as may be otherwise specifically provided in this division, the policies of this chapter shall constitute the standards by which the adequacy of local coastal programs, as provided in Chapter 6 (commencing with Section*

> *30500), and, the permissibility of proposed developments subject to the provisions of this division are determined.*

One of the basic goals specified under Coastal Act Section 30001.5 is to:

> *Protect, maintain, and where feasible, enhance and restore the overall quality of the coastal zone environment and its natural and artificial resources.*

Coastal Act Section 30231 addresses restoration of wetlands more specifically, stating in relevant part:

> *The biological productivity and the quality of… wetlands… appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored…* (emphasis added)

As discussed in Section 2.2.2 above, the proposed drill site is located on property that has been under consideration for wetlands restoration since at least the 1970's and is currently listed as a priority acquisition site by the Southern California Wetlands Restoration Project (SCWRP). The SCWRP is an organization of federal, state and local governments for the purpose of restoring and enhancing wetlands and watersheds in the Southern California region. The option agreement specifies that of the 196 acres offered for sale, Bixby would retain: (1) up to five acres of the property for oil and gas production and (2) a ten acre sanitary landfill adjacent to Studebaker Road (see discussion of drill site alternatives below). The POLB is the prospective major source of acquisition, restoration, and management funding, and the SLC is the likely titleholder.

In consideration of the agreement, the POLB has prepared a conceptual wetland restoration plan (Exhibit 6-7). In order to prepare this plan, the POLB consulted with Bixby concerning the location of the area(s) to be reserved for oil and gas development. Bixby indicated that oil and gas facilities would be consolidated onto two sites: (1) the proposed drill site for the Samedan project, and (2) a site adjacent to Shopkeeper Road, south of Marketplace Pond (see Exhibit 7). According to the information that Bixby provided to the POLB, the Tank Battery No. 2 site is included in the area designated for acquisition and restoration. Similar conceptual restoration plans were prepared for the SLC in November 1998 (Exhibit 6).

Both of the conceptual restoration studies assumed that the proposed drill site and access road as proposed by Samedan would be located within the wetland area. The restoration plans were designed with the proposed drill site as a constraint. The plans provide conceptual alternatives for restoring the wetlands with the drill site remaining in place as an "island" within the restored area. Accordingly, the plans include measures to protect the restored habitat from the impacts of the proposed oil and gas development. These mitigation measures include a 100-foot-wide buffer surrounding the drill site and access road and berms and dikes to prevent the release of spilled oil and contaminated runoff into the wetlands.

Neither of the conceptual restoration plans considered the issue of how the proposed drill site would affect the overall goal of restoring wetland habitat in Los Cerritos. The drilling project as proposed would preclude restoration of the areas that would be occupied by the project site and

the drill site access road for approximately twenty years, creating an oilfield island within the restored wetland system. This island will physically divide what would otherwise be contiguous habitat, degrading its biological value. In accordance with the Commission's adopted guidelines for development adjacent to wetlands, new development should be separated from wetland habitat by a 100-foot-wide vegetated buffer *(CCC 1994, CCC 1981)*. Creation of a buffer to separate the proposed development from the wetland would further reduce the restorable area. Although these areas could eventually be restored to wetlands upon completion of the petroleum production, the removal of facilities, site remediation and grading would further disturb adjacent habitat.

In addition to precluding restoration of the immediate project site and the buffer area, impacts associated with the development will degrade the habitat value of the restored wetlands surrounding it. The impacts of noise, light, vibration, and oil spills associated with the proposed project to the currently existing ESHA is discussed in section 2.3.1 above. Once restored, this habitat area would be even more sensitive to such impacts. The proposed project would interfere with the goal of restoring Los Cerritos to a fully functioning wetland ecosystem.

Samedan's analysis of potential environmental impacts of the project concludes that there is no risk that the Los Alamitos Significant Ecological Area (SEA) could be affected by an oil spill because it is separated from the drill site and associated pipelines by a series of berms and dikes, stating:

> *"If any oil were spilled as a result of the proposed drilling project, it would be contained to a small portion of the oilfield by berms and roads that occur throughout the field."*

The application does not consider the effects of a spill to the wetlands that are intended for restoration directly adjacent to the proposed drill site. The release of oil into the restored wetland system would be devastating to the habitat. Restoration of the wetlands would require that re-establishment of hydrologic connections to the Los Cerritos Channel and open ocean waters. Spilled oil could readily flow through such connections throughout the restored area and into open waters.

The staff requested that Samedan provide additional information necessary to evaluate whether the proposed slant-drilling project would interfere with wetlands restoration. Samedan included a siting analysis with the permit application that assesses the feasibility of locating the drill site outside of the wetlands restoration area altogether. However, as discussed in Section 2.3.4 below, this alternatives analysis is deficient. Samedan and Bixby assert that the proposed project will be accommodated under any property transfer for wetlands restoration, but have not demonstrated that the development will not be detrimental to a restored wetland and/or limit restoration opportunities.

With the likelihood that the area will be the subject of a restoration project within the expected lifetime of the drilling project, it is necessary to consider whether the drill site could be relocated to maximize, consistent with the wetland restoration goals of the Coastal Act, the potential for such restoration on the site proposed for the project and in the larger area which surrounds it. Samedan's proposed site is approximately 350 feet from the nearest public road (Westminster

Boulevard), well within the area proposed for restoration. Pursuant to the Long Beach Oil Code, the drilling site must be located at least 75 feet away from the nearest public road. Samedan has not presented an analysis of whether the project site could be located closer to the boundaries of the Bixby Ranch property to avoid the creation of an island within the restorable wetland area. For example, the staff identified the 10-acre landfill area next to Studebaker Road as a possible alternative site for the drilling project. As discussed in section 2.3.4 below, Samedan did not fully consider this potential alternative. The landfill site and other possible alternatives should be thoroughly analyzed, factoring in the goal of maximizing wetland restoration opportunities.

Samedan does not adequately evaluate whether the drill site could be relocated either completely outside of, or to a more appropriate alternative site within, the wetland restoration area to optimize restoration opportunities, or whether the project could include mitigation measures that would reduce the project effects to the surrounding habitat. Without a thorough analysis of such alternatives and mitigation measures, the Commission cannot find the project consistent with the wetland restoration goals of the Coastal Act. Therefore, the Commission finds that Samedan has not demonstrated that the proposed development is in conformity with Coastal Act Section 30231.

2.3.3 Consolidation of Facilities

Coastal Act Section 30262 states in relevant part:

> *Oil and gas development shall be permitted in accordance with Section 30260, if the following conditions are met:*
>
> …
>
> *(b) New or expanded facilities related to such development are consolidated, to the maximum extent feasible and legally permissible, unless consolidation will have adverse environmental consequences and will not significantly reduce the number of producing wells, support facilities, or sites required to produce the reservoir economically and with minimal environmental impacts.*

Coastal Act Section 30262(b) requires consolidation of new or expanded oil and gas development with existing facilities to the maximum extent feasible. This policy is particularly important for the proposed project given the anticipated wetlands restoration. Currently, wells, pipelines and processing facilities are distributed throughout the Los Cerritos wetlands. Consolidation of these facilities would significantly increase the acreage available for wetlands restoration.

In order to evaluate the consistency of the proposed project with the Coastal Act's "maximum feasible consolidation" standard, the staff has requested that Samedan provide a detailed consolidation plan showing where each existing and proposed well and all associated pipelines and processing facilities would be located. Staff also asked Samedan to consider the feasibility of

locating the proposed wells in the area of Tank Battery No. 2 in order to increase the consolidation of facilities.[3]

Samedan responded to staff's information request indicating that no specific facilities consolidation plan exists and that it would not be feasible to site the proposed wells at Tank Battery No. 2 because, among other reasons, this would require drilling through the main fault trace of the Newport Inglewood earthquake fault.

As proposed by Samedan, pipelines would transport the oil and gas produced from the drill site through the wetland area proposed for restoration to processing facilities located on the other side of the earthquake fault. Failure of one or more pipelines due to an earthquake would likely spill oil directly into the wetland area. Although Samedan asserts in the permit application that drilling through the fault line would increase the risk of an oil spill, no comparative analysis of the risks associated with a pipeline failure is provided. Nor does the application assess whether the risk of pipeline failure would be reduced if the drill site were located on the same side of the fault as the processing facilities. In the absence of such analysis, the Commission cannot evaluate the relative environmental impacts of locating the drill site on either side of the earthquake fault.

Samedan and Bixby have stated that a restoration project would involve consolidation of the oil and gas facilities located in the wetlands because the new wells would be sited on an existing fill-pad where oil and gas facilities are already located. Bixby indicated that the sale of its property for wetland restoration would provide for the reservation of five acres to allow oil and gas production to continue on its Los Cerritos property. The five acres would be split between two sites, one on either side of the fault line. In accordance with the conceptual restoration plans discussed above, the two sites would be Samedan's proposed drilling pad and a site near Marketplace Pond (Exhibits 6-7). Based on information provided by Bixby to the SCC and the POLB, all oil and gas facilities would be consolidated within these two sites. However, Samedan's permit application indicates that oil and gas from the project would be processed at Tank Battery No. 2. Samedan also states, that the proposed drill site could serve as one of the consolidated sites depending on the economic viability of the project.

It is reasonably foreseeable that existing oil and gas facilities in the Los Cerritos wetland area will be relocated and consolidated. Samedan has not provided sufficient information to determine whether consolidation centered on the proposed drill site and either Tank Battery No. 2 or the site south of Marketplace Pond would represent maximum feasible and legally permissible consolidation of facilities as required under Section 30262(b), or, alternatively, whether some other site or sites would be more technically suited for facility consolidation. Samedan has not indicated what specific facilities would be relocated to the proposed drill site under this scenario or data to demonstrate that such a plan is technically feasible.

To fully evaluate the proposed project under Section 30262(b) and the restoration goals discussed above, Samedan must provide a specific consolidation plan indicating how facilities would be

[3] Tank Battery No. 2 contains most of the oilfield's major processing facilities and storage tanks, the tie-ins to the oil and gas shipping lines, and the wastewater disposal line.

relocated to the minimum number of sites possible. The plan should include analysis of the technical and legal feasibility of the consolidation alternatives, and be designed with consideration of the wetland restoration goals for the Los Cerritos system. Until such time that a more thorough examination of consolidation alternatives is provided, the Commission cannot determine that the proposed project is consistent with the requirements of Coastal Act Section 30262(b). Therefore, the Commission finds that Samedan has failed to demonstrate that the proposed development is in conformity with Coastal Act Section 30262(b).

2.3.4 Alternatives Analysis

In accordance with the Coastal Act and the California Environmental Quality Act (CEQA), approval of the proposed project can be granted only if there are no feasible alternatives or mitigation measures that would substantially lessen the extent of the project's inconsistency, if any, with the policies and development standards contained in the Coastal Act. As discussed above, the project site is located in a filled wetland system and is surrounded by degraded but valuable wetland habitat. This area is subject to ongoing negotiations concerning wetlands restoration. A component of the restoration plans being discussed will be the consolidation of oil and gas production facilities in order to maximize restoration opportunities. The proposed drill site location will adversely affect the existing degraded wetland habitat surrounding the site and will reduce the habitat value of these areas when restored. The proposed project would also preclude restoration of the areas occupied by the drill site and access road for at least 20 years. An alternatives analysis under the applicable provisions of the Coastal Act and CEQA should consider alternatives that would lessen or avoid these and any other environmental impacts associated with the project.

Samedan indicates in the permit application that the maximum horizontal distance that the drill site can feasibly be located from the targeted reservoir is 5,000 feet. Potential sites for the slant drilling project identified in the application are therefore limited to the area within a 5,000-foot-radius of the bottom hole location. The permit application includes an alternative sites analysis (Exhibit 8). Within a 5,000-foot radius of the proposed bottom hole location, Samedan identified three potential alternatives to the proposed project site location. Alternative Site 1 is located just north of the Los Cerritos Channel and east of the trailer park. Site 2 is located just east of the Los Cerritos Channel on the north side of the power plant. Site 3 consists of two open areas near freeway on ramps north of the Bixby Ranch property on the east side of the channel. None of these alternative sites is located within the area considered for wetland restoration.

In addition to the alternative sites considered in the permit application as originally submitted, the staff requested Samedan to examine several other alternative sites that would avoid or minimize impacts to existing and future wetland habitat.

The alternative sites identified by staff include:

1. Tank Battery No. 2;
2. The sanitary landfill near the intersection of Westminster Boulevard and Studebaker Road;
3. An unoccupied area within the power plant site on the west side of the San Gabriel River; and

4. An area south of the Market Place pond, adjacent to Shopkeeper Road.

Samedan rejects all of the identified alternatives on the basis that they are not feasible and/or would have greater environmental impacts than the proposed site.

The Coastal Commission finds Samedan's alternative sites analysis deficient in a number of ways, including:

1. Staff requested that Samedan provide documentation to support the assumption that the drill site must be within 5,000 horizontal feet of the reservoir. Samedan replied by reiterating its original assertion, stating: "Because the depth of the bottom holes are expected to reach approximately 11,800 feet in depth, the applicant has determined this [5,000 feet] to be the maximum surface distance that will accommodate the pumping unit/sucker rod artificial lift system which will be utilized to pump the oil." Samedan has not provided supporting documentation in the form of a technical analysis, studies, or other data concerning the technical limitations to extended reach drilling operations.

   Currently, the record for maximum horizontal displacement between the surface location of a well and a targeted reservoir is 34,728 feet. The total depth of this well, drilled in Argentina, is 36,683 feet *(Oil & Gas Journal: 5/17/99 p. 51; 6/7/99 p. 60)*. In light of the continuing advancements in extended reach drilling technologies, the 5,000-foot horizontal displacement limit set by Samedan cannot be accepted without the support of a complete technical analysis.

2. Samedan's alternatives analysis does not take into account the degree of compatibility, or lack thereof, of the alternative sites with future wetlands restoration. Without such analysis, the Commission cannot conclude that the proposed drill site represents the least environmentally damaging feasible alternative.

3. Samedan rejects the potential alternatives considered, in part, on the basis that they are not located within Oil Operating Areas under the Long Beach Oil Code. The Oil Code provides for revisions to create new operating areas by approval of the City Council. Therefore, the requirement to obtain such regulatory approval is not, standing alone, a valid basis for determining that a potential alternative is infeasible under either the Coastal Act or CEQA.

4. Samedan rejects the potential alternatives considered, in part, on the basis that, unlike the proposed site, the alternatives would all require construction of new processing and storage facilities. However, the project description indicates that the crude oil, natural gas and reservoir water produced at the drill site will be transported via pipeline to Tank Battery No. 2, located over 1,000 feet to the west, for processing prior to sale. The alternatives analysis does not explain why this option would not be available for the alternative sites.

5. Samedan rejects the potential alternatives considered, in part, on the basis that alternative sites that are located a greater distance from the existing processing facilities renders these alternative sites infeasible. Samedan provides no quantitative analysis or data to support this assertion, stating simply: "The fact that such a site is at some distance from the existing processing facility, where the proposed drill site is very close to the processing facilities,

makes it substantially less feasible than the proposed site." The conclusion that a potential alternative is infeasible must be supported by an examination of the specific economic, physical and legal constraints associated with the alternative under consideration. In the absence of such analysis, the Commission cannot dismiss potentially environmentally superior alternatives.

6. As discussed in section 2.3.3 above, Samedan rejected Tank Battery No. 2 and the area near Marketplace Pond as potential alternative project sites, in part, on the basis that these sites would require the drill bores to cross through the Newport Inglewood earthquake fault. The application, however, does not describe in any specific detail the environmental risks associated with drilling through the fault line. Samedan proposes to transport via pipeline the oil and gas produced from the drill site through the wetland area proposed for restoration to processing facilities located on the other side of the earthquake fault. By locating the drilling site on the same side of the earthquake fault as the processing facilities, the risk of pipeline failure would be reduced. The application contains no comparative analysis of the risks associated with pipeline failure versus well failure. In the absence of such analysis, the Commission cannot evaluate the relative environmental impacts of locating the drill site on either side of the earthquake fault.

7. Samedan rejected the sanitary landfill adjacent to Studebaker road as a potential alternative project site, in part, because the landfill is unconsolidated and unstable and cannot support the drilling and production equipment necessary to undertake the project. This assertion is not supported by any specific analysis of engineering constraints to drilling on unconsolidated fill or any data concerning the geological stability of the landfill site. Samedan does not consider whether appropriate site preparation or other engineering solutions could render the landfill suitable for drilling. Oil and gas development is carried out on a variety of terrain types ranging from bedrock to the ocean floor. Engineering solutions to the problems associated with drilling on unconsolidated terrain date back to at least the beginning of the century. The entire Los Cerritos oil field is, in fact, a landfill. Without a specific showing along with supporting documentation that it is technically infeasible to drill from the sanitary landfill, this alternative should not be dismissed from consideration.

8. Samedan rejects the potential alternatives considered, in part, on the basis that it does not currently possess surface and/or mineral rights necessary to drill from these locations. However, Samedan does not demonstrate that obtaining such rights is infeasible. The mere absence of property interests necessary to carry out the project at an alternative location, absent a showing that the acquisition of such interests is not possible, does not constitute a valid basis for determining an alternative to be infeasible.

9. Samedan has not provided an analysis of alternatives for the consolidation of processing and production facilities. However, based on information provided by Bixby to the Port of Long Beach for the preparation of the conceptual restoration plan, existing processing facilities would be relocated to provide for wetland restoration. As further discussed in section 2.3.3, Samedan has not provided an analysis of feasible alternatives for facilities consolidation.

10. Samedan rejects as a potential alternative drill site an unoccupied area adjacent to the tank farm on the Hanes Steam Generating Plant northwest of the San Gabriel River, in part, on the basis that this site is "very close to surrounding residential neighborhoods." However, this potential alternative site is approximately ¼ mile from the nearest residential development. The distance between the power plant site and the nearest residential development is sufficient to allow this alternative to be considered under the well location restrictions established by the City of Long Beach Oil Ordinance.

2.3.5 Local Coastal Program

Coastal Act Section 30604 states in relevant part:

> *(a) Prior to certification of the local coastal program, a coastal development permit shall be issued if the issuing agency… finds that the proposed development is in conformity with Chapter 3… and that the permitted development will not prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3…*

The Los Cerritos section of the City of Long Beach Local Coastal Program (LCP) was not certified by the Coastal Commission because of significant issues concerning restoration of the wetland system. Los Cerritos is the only uncertified area in the City's coastal zone. For the reasons described above, the Commission cannot find that the proposed development is in conformity with Coastal Act Sections 30231, 30240 or 30262. Therefore, as an additional ground for the Commission's decision to deny this application, the Commission finds that approval of the proposed development would prejudice the ability of the local government to prepare a local coastal program that is in conformity with Chapter 3 in conflict with Coastal Act Section 30604.

2.4 California Environmental Quality Act

Section 13096 of the Commission's administrative regulations requires Commission approval of CDP applications to be supported by a finding showing the application, as modified by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(A) of the CEQA prohibits approval of a proposed development if there are feasible alternatives or feasible mitigation measures available that would substantially lessen any significant impacts that the activity may have on the environment.

For the reasons described herein, Samedan has not provided sufficient information to allow the Commission to determine that there is no less environmentally damaging feasible alternative or mitigation measures to avoid or substantially lessen adverse impacts that the project will cause to the environment. Therefore, the Commission denies this permit application on the grounds that the proposed development is inconsistent with Section 21080.5(d)(2)(A) of the CEQA.

APPENDIX A

SUBSTANTIVE FILE DOCUMENTS

California Coastal Commission 1981. *Statewide Interpretive Guidelines for Wetlands and Other Wet Environmentally Sensitive Habitat Areas*.

California Coastal Commission 1984. *Adopted Findings Certifying with Suggested Modifications the Los Cerritos Wetlands Local Coastal Program*. April 11, 1984.

California Coastal Commission 1994. *Procedural Guidance for the Review of Wetland Projects in the California Coastal Zone.*

Long Beach 1984. *Los Cerritos Wetlands Local Coastal Program*. City of Long Beach and County of Los Angeles, Final Revision, April 11, 1984.

MEC 1991. *Ecological Descriptions and Evaluation of Proposed Enhancement/Restoration for Eight Southern California Wetlands.* MEC Analytical Systems, Inc., Final Report, December 1991.

Reijnen et. al. 1996. *Disturbance by Traffic of Breeding Birds.* Biodiversity and Conservation, pages 567-581, vol. 6, 1997.

Rodgers & Smith 1994. *Set-Back Distances to Protect Nesting Bird Colonies from Human Disturbance in Florida.* Conservation Biology, pages 89-99, vol. 9, no. 1, February 1997.

Sorensen, J. 1982. *Southern California Regional Wetland Restoration Study*. Final Report to the State Coastal Conservancy.

State Coastal Conservancy 1998. *Los Cerritos Wetlands Investigation of Potential Wetland Restoration Alternatives.*

Zedler, J.B. 1984. *Salt Marsh Restoration: A Scientific Perspective and Southern California Focus.* California Sea Grant College System, Rept. T-038.